

# AIF 503N SERIES

## THREE-PHASE FLICKER IMPEDANCES UP TO 75A



### FOR TESTS ACCORDING TO ...

- > EN 61000-3-11
- > EN 61000-3-3
- > IEC 60725
- > IEC 61000-3-11
- > IEC 61000-3-3
- > JIS C 61000-3-2







### APPLICATION

The AIF 503N-series are three-phase flicker impedances with a nominal current from 16A up to 75A per phase offering two different impedance values. Zref is used as the flicker impedance as per IEC/EN 61000-3-3 and specified by IEC 60726. Ztest is used for equipment being intended for connection to a public low-voltage distribution system having a service current supply capability of 100A and above as specified in IEC/EN 61000-3-11.

### HIGHLIGHTS

- > Impedances values as per IEC/EN 61000-3-3 & IEC/EN 61000-3-11
- > Non-saturable air coil inductors
- > Line voltage 3 x 400V
- > Line current up to 75A per phase (depending on model)
- > Automatic overcurrent protection
- > Status indication by LED
- > Remote-controlled by DPA 503N

### APPLICATION AREAS

-  INDUSTRY
-  MEDICAL
-  BROADCAST
-  RESIDENTIAL
-  RENEWABLE ENERGY
-  TELECOM

## TECHNICAL DETAILS

## OVERVIEW

## AIF 503N MODELS

AIF 503N16	Three-Phase Flicker Impedance 16A
AIF 503N32.1	Three-Phase Flicker Impedance 32A
AIF 503N63.1	Three-Phase Flicker Impedance 63A
AIF 503N75.1	Three-Phase Flicker Impedance 75A

## TECHNICAL DETAILS

## AIF 503N16

Line current	16A per phase
3-ph output	CEE connector 16A (3P,N,PE) 4mm Safety laboratory connectors
1-ph output	One for each phase (L1,L2,L3), connector country specific
Mains supply	115/230V, 25W, 50/60Hz
Housing	19", 3HU
Weight	approx. 20kg

## AIF 503N32.1

Line current	32A per phase
3-ph output	CEE connector 32A (3P,N,PE), 4mm Safety laboratory connectors
1-ph output	One for each phase (L1,L2,L3), connector country specific
1-ph low current	Connector on phase L1, Range: 100mA - 10A
Mains supply	115/230V, 200W, 50/60Hz
Housing	19", 25HU, moveable rack on castors
Weight	100kg
Size	1245mm x 553mm x 780mm

## TECHNICAL DETAILS

## AIF 503N63.1

Line current	63A per phase
3-ph output	High-current safety connectors 80A
1-ph output	One for each phase (L1,L2,L3), connector country specific
1-ph low current	Connector on phase L1, Range: 100mA - 10A
Mains supply	115/230V, 200W, 50/60Hz
Housing	19", 38HU, moveable rack on castors
Weight	230kg
Size	1800mm x 600mm x 800mm

## AIF 503N75.1

Line current	75A per phase
3-ph output	High-current safety connectors 80A
1-ph output	One for each phase (L1,L2,L3), connector country specific
1-ph low current	Connector on phase L1, Range: 100mA - 10A
Mains supply	115/230V, 200W, 50/60Hz
Housing	19", 38HU, moveable rack on castors
Weight	approx. 250kg
Size	1800mm x 600mm x 800mm

## TECHNICAL DETAILS

## COMMON DATA (ALL MODELS)

GENERAL	
Configuration	3-phase (3L/N/PE)
Line voltage	3 x 400V ± 10%
Line frequency	47Hz - 63Hz
Bypass for harmonics	Remote controlled switch
Interface	15-pin SubD (DPA 503N control)
Indicators	LED's indicating the active status (Bypass or impedance in use).

IMPEDANCE	
Zref at 50Hz	RA = 0.24ohm, XA = 0.15ohm RN = 0.16ohm, XN = 0.10ohm
Ztest at 50Hz	RA = 0.15ohm, XA = 0.15ohm RN = 0.10ohm, XN = 0.10ohm (not available in AIF 503N16)
Accuracy	Better than 3%
	Each inductor is a non-saturable air coil, matched manually to the specified value.

AMBIENT CONDITIONS	
Temperature	0°C to 35°C
Rel. humidity	80%, non condensing
Atmospheric pressure	86 kPa (860 mbar) to 106 kPa (1,060 mbar)
Cooling	fans, active cooling control

## OPTIONS

OUTPUT FOR VERY LOW CURRENTS	
VLCM Kit AIF 503N	
Measuring output	For very low current Connector on phase L1
Current range	5mA - 500mA
Accuracy	< 1% of measured value

# COMPETENCE WHEREVER YOU ARE



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Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Subject to change without further notice.